

SCALABLE LAYERED CODING IN A MULTI-LAYER, COMPOUND- IMAGE DATA TRANSMISSION SYSTEM

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ABSTRACT OF THE DISCLOSURE

A data coder prepares a frame of data for transmission over a data channel. The frame is first broken into a series of non-overlapping blocks. The blocks are analyzed to determine if they are a "picture" block or a
10 "non-picture" block. Picture blocks are compressed to produce one or more layers of data, including a base layer and, optionally, one or more enhanced layers. Non-picture blocks are similarly compressed, but according to different compression procedures. Prior to sending the compressed layers of data to a scheduler for transmission on the data
5 channel, the blocks are checked to see if they have changed more than a threshold amount from the last time they were sent. If the block has changed more than the threshold, the changed block is sent to the scheduler, in compressed form. If the block has not changed more than the threshold, only an indication of the block, and not the block itself, is sent to
20 the scheduler.